

COVERT NUMBER MARKING IN CHOCTAW NOUNS

Marcia Haag

State University of New York at Stony Brook
University of Oklahoma

The ways that Choctaw accounts for the registration of Number has bearing on our concept of 'inflection' versus that of 'lexical'. We think of inflection as necessarily involving morphology in an overt way (Anderson 1992) and also operating at, or being discernible at, the level of the phrase. A lexical operation, in contrast, is limited to the boundaries of the word, and may be irregular, that is, unpredictable, in both form and in items which may be affected.

Choctaw number marking makes its assignment to one group or the other—inflection or lexical operation—difficult because nouns are never morphologically marked for Number (or anything else); the manifestation of Number appears always peripheral to the noun and traverses the phrase and even the clause; and while there is a plethora of non-parallel number-marking strategies, number marking by any means is not obligatory.

The Choctaw situation points to Number as a categorial property of Nouns rather than as a lexical process or inflection.

1. Number Modifiers in the Noun Phrase

In the following examples, we note that various quantifying or modifying words may appear in the Noun Phrase that may specify number directly, as in numerals, or signify some value of Number (singular, dual, plural, collective, generic) along with other notional material. The noun itself is never marked.

- (1) hattak 'man'
hattak toklo 'two men'
hattak moma 'all men'
hattak aʔiiha 'mankind'; 'men'; 'group of men'; each and all of the type "man"
hattak okla 'men'
hattak okla aʔiiha 'mankind'
takkon aʔiiha 'the peach (generic)'
issoba okla 'horses' (restricted to some dialects)
* takkon okla 'peaches'

An examination of this data will show that there is no word, no morpheme, and no overt operation that lends only the sense of 'plural' to a Choctaw noun. It is also important not to overgeneralize these modifiers as co-equal quantifiers. *Aʔiiha* and *okla* have some of the characteristics of classifiers in Corbett's sense (1991) in that they appear only with another noun but are lexically discrete. (Some dialects increasingly allow the use of *okla* alone as the noun 'people'.) Both supply notional content in addition to 'plural': *aʔiiha* has the sense

of 'kind', which makes it more of a generic and collective marker; and *okla* is restricted to use with humans, and in some dialects, with animates, so it cannot be a general pluralizing morpheme. Notice that *okla* and *at̃iha* may be used together, which would seriously weaken the case that they are classifiers, and of course, there is no general system of noun classifiers in Choctaw.

Another kind of number marking that appears in Noun Phrases is that of a small class of adjectives that indicates number as well as quality.

- (2) *fani ossi* 'small squirrel'
fani chipita 'small squirrels'
fani chito 'big squirrel'
fani hochito 'big squirrels'

Again we note that the noun is never itself affected morphologically. A noun phrase is never obligatorily marked for Number.

2. Number Agreement in the Verb Phrase

In the Verb Phrase we see a variety of non-parallel strategies for registering number. Among them we have what appear to be suppletive verb forms (but see section 3), pluralizing and dualizing markers for animate subjects, and sets of verb alternations that indicate with a plural morph *-oh-* either plural subject or plural object, depending on the transitivity of the verb. As with the Noun Phrases, these may be redundantly marked, and they have varying degrees of obligatoriness.

2.1 Marked Verb Forms Indicating Number. Particularly among the verbs of motion and position, we see a large number phonologically disparate forms marked for singular, sometimes dual, and plural, though not for person. (*-at* is a subject marker.)

- (3) *Hattak-at ia-h.* 'The man goes.'
Hattak-at ittiachi-h. 'Two men go.'
Hattak-at it̃kooli-h. 'The men go.'
Il-it̃kooli-h. 'We go.'
- (4) *Fani-at binili-h.* 'The squirrel sits down.'
Fani-at chiiya-h. 'Two squirrels sit down.'
Fani-at binohli-h. 'The squirrels sit down.'
I-chiiya-h. 'We two sit down.'

In usage, the marked forms are preferred but not obligatory. I hear especially in my consultants' speech the form *il-ia-h* 'we go', perhaps because the person clitic is marked for number (plural). The plural imperative forms (first and second person) are also preferentially based on *ia*, not *ittiachi* or *it̃kooli*: *kil-ia* 'let's go'; *kil-io-nna* 'let's not go'. The number-marked forms are possible, however, so that we may have *oh-ia*, *oh-ittiachi* 'you two go',

and *oh-#kooli* 'go (pl.)' as well as first person plural *kil-ittiachi* 'let us two go' and *kil-#kooli* 'let's go'. In the plural imperative, the second person takes the plural marker *oh-* or its allomorphs *ho-*; *hoh-* while the first person takes the subjunctive nominative *kil-*.

Another notable feature of the number-marked forms is that some of them appear listed with more than one singular lexeme. A good example is *ashwa* 'two are there', which may also be used for 'two sit' and 'two lie'. It is the dual form of both *ata* 'be there' and *asha* 'be placed there', which is as commonly used for 'sit' as is *binili*. Speakers will often mix forms of *binili* and *asha* when asked to give number-marked alternations.

- (5) *itoola* 'lie' (sg.)
ashwa-h 'two lie'
kaha-h 'two lie'

- (6) *ata* 'be there' (sg.)
ashwa-h 'two are there'
maya-h 'they are there'

- (7) *binili* 'sit' (sg.)
chiiya-h 'two sit'
ashwa-h 'two sit'
binohli-h 'they sit'

- (8) *asha* 'be placed there, sit' (sg.)
ashwa-h 'two sit'

Another interesting feature is the mixing of number-marked forms. We have plural *kahmaya* 'they lie' derived from the dual *kaha* 'two lie' and the plural *maya* 'they are there'.

This evidence is persuasive that the number-marked forms are not members of inflectional paradigms. They instead represent lexemes that are closely related semantically, not derivations of a single lexeme.

2.2 Predicative *okla-h*. Most Choctaw verbs do not have number-marked alternations. To indicate duality or plurality, such verbs may use the lexeme *okla*, this time marked with the predicative *-h*. Remarkably, the same lexeme indicates 'plural' when it precedes the verb and 'dual' when it follows the verb, which is marked with a connector *-t*, the same one used to connect subordinate verbs.

- (9) *Ohoyo-at okla-h pisa-h*. 'The women are looking at it.'
Ohoyo-at pisa-t okla-h. 'Two women are looking at it.'

Okla-h may appear with number-marked verb forms.

- (10) Ohoyo-at okla-h binohli-h. 'The women are sitting down.'

But predicative *okla-h* has the same restrictions in the Verb Phrase as it does in the Noun Phrase: it must be used with animates, and in some dialects, with humans only.

The syntactic status of predicative *okla-h* is also by no means transparent. It is clearly free-standing and not an affix, as is seen by the presence of the predication marker *-h* on the plural form and by the presence of the verbal subordinator *-i* on the dual form. Choctaw has a number of affixes that attach to the stem, and these always show elision of the final stem vowel and attachment of grammatical markers of the various kinds outside the complex, never inside. For comparison, we see examples of an inflectional affix, a subordinated verb, and the modification of one predicate by another.

- (11) toksali- 'work'
 tokalahīla 'can work' (potential mood marker *-ahīla*)
 ish-tokalahīla-h 'you can work'
- (12) toksali- 'work' tahli- 'finish'
 toksali-t tahli- 'finish working' (subordinator *-i*)
 toksali-t ish-tahli-h 'you finish working'
- (13) toksali- 'work' billia- 'always'
 toksali-h billia-h 'always works'
 ish-toksali-h billia-h 'you always work'

Recalling a statement of Beard's (1992:194) that "no language marks Number with a free morpheme," we might be tempted to offer predicative *okla-h* as a counterexample, except that this strategy is clearly not inflectional: it is not obligatory, it occurs with other number-marking forms, and it is limited to one semantic class of subject nouns, humans, or in some dialects, animates.

2.3 Verbal Alternations with Morphological Plural. One class of nouns that receives short shrift with the number-indicating strategies so far outlined is that of the inanimates. In Choctaw, a fairly large number of verbs participate in a class that contains the four alternations of the parameters *transitive/intransitive* and *singular/plural*. The plural marker is the morph *-oh-* with its allomorphs *-ah* and *-o-*, which is (usually) infixed in the penultimate syllable. The *-oh-* marker will indicate plural subject in intransitives and plural object in transitives.¹ Since Choctaw makes a transitive/inchoate morphological distinction, a sketch can be constructed of the two form classes displaying the four alternations. The two classes differ in their association of the affix *-li* with transitivity, as the following examples show.

¹This plural/transitivity strategy is also seen in such mutually unrelated languages as Georgian, Hopi, Navajo, and O'odham.

A great many Choctaw verbs have the *-a /-li* morphological distinction: *-a* marks the intransitive/inchoative member and *-li*, or one of its allomorphs produced by assimilation to a final stem consonant, marks the transitive member.

- (14) *okcha* 'wake up; be awake'
okchali 'wake someone up'
basha 'be cut'
bashli 'cut something'
kobafa 'break; be broken'
kobaffi 'break something'

In addition, many verbs that have to do with operations on materials, largely represented by the class of inanimate nouns, include forms with the infixed plural marker *-oh-*. (In this example, we see the allomorph *-ah-*.)

- (15) *bokafa* 'to crack open': singular, intransitive
bokaffi 'to crack something open': singular, transitive
bokahli 'to crack open': plural, intransitive
bokahlich 'to crack things open': plural, transitive

In one of the two classes the use of *-li* (as in *bokahli* above) to indicate the intransitive member of the plural pair contradicts the trend of the *-a /-li* markers. When *-li* is used this way, *lich*, *-li* plus causative *-chi* must indicate the transitive plural member.

The second class respects the regular *-a /-li* associations. (In many, probably most, of these association-preserving derivations, the plural morpheme is inserted as a new penultimate syllable, with the /h/ elided before final *-a*. In the previous example, the *-oh-* allomorph retained the syllabic vowel but replaced *f + li* with *h + li*.)

- (16) *katapa* 'be cut off' singular
katabli 'separate something'
katapoa 'be cut off' plural
katapohli 'to cut off or divide from the others' plural

These verbs, then, indicate number on what are often inanimate subjects and objects without resort to numerals or other quantifiers.

- (17) a. *Oksak-at bokafa-h*. 'The nut is cracked open.'
 b. *Oksak-at bokahli-h*. 'The nuts are cracked open.'
 c. *Oksak bokaffi-h*. 'He's cracking open a nut.'
 d. *Oksak bokahlich-h*. 'He's cracking open nuts.'

These verbs do not prohibit use of *okla-h*, which will always indicate plural animate subject, and other quantificational words may serve to enhance meaning.

- (18) Oksak lawa okla -h bokahlichì -h.
 nut many pl/anim pred crack/plu/tran pred
 They are cracking open many nuts.

It is important here to distinguish the *-oh-* plural morph from another operation on selected verbs, particularly verbs that denote actions with distinct beginnings and endings (events). In some forms, a subtractive operation on the verb stem will render the meaning 'repetitive action' (Broadwell 1992).

- (19) tolobli 'jump'
 tolli 'jump up and down'
 balili 'run'
 balli 'run around'
 kapooli 'bite'
 kabli 'nibble'

We should note that, just as not every verb is subject to *-oh-* insertion to make plural objects, there is no general word formation rule that will permit the subtraction of a medial syllable to form a repetitive. There are also a few forms, notably, *kobbi* that indicate plural object, not repetition.

- (20) kobaffi 'break one thing' (trans.)
 kobohli 'several things break' (intrans.)
 kobohlichì 'break several things' (trans.)
 kobbi 'break several things' * 'break again and again'

My consultant volunteers an intransitive mate for *kobbi*, *koba*, (not in the dictionaries), along with a slight usage distinction: he prefers *kobohlichì* to mean "breaking things such as sticks one by one," while *kobbi* is more "breaking a bundle of sticks."

Again, we do not have inflection for Number in these forms, even though we have a regular morphological operation that is associated with a syntactic and semantic outcome. Membership in the class is arbitrary: we may not insert *-oh-* into any verb to indicate Number in its arguments.

3. Paradigms and Suppletion

Although Choctaw has a fairly large number of verb forms that differentiate number of the subject and are completely different phonologically, (e.g. *binili-h* 'he sits'; *chiiya-h* 'two sit'), I will argue that these do not represent suppletion because Choctaw does not have regular grammatical marking for number. Mel'cuk (1994) offers a formal definition of suppletion that

requires, first, maximal dissimilarity of phonological form, and second, semantic difference that is grammatical. He states that there are, then, degrees of suppletion, with 'quasi-suppletion' in words that are irregularly grammaticalized but bear phonological resemblance to each other, as in his example of English *child-children*, and at the other pole, pairs that are 'more than suppletion' or semantically congruent but distinct lexemes.

What we have in Choctaw are fine examples of what Mel'cuk terms 'more than suppletion': in our 'sit' example, *chiiya* 'two sit' cannot be shown to be derivationally related to *binili* 'sit' as a member of the same lexeme. First analyzing informally, *chiiya* means 'two sit', but Choctaw speakers do not find the *chiiya* meaning to be particularly closer to the meaning of *binili* than is *ashwa* 'two sit'. At the same time, they feel that dual *ashwa* is a form of *asha* 'to be placed there', with which it shares considerable phonological similarity. *Chiiya* then coincidentally means 'two sit' and thus contrasts semantically with *binili* 'one sits'. While *binohli* belongs to the *-oh-* intransitive class described above, and is thus derivationally related to *binili*, membership in that class is arbitrary.

Byington (1915) somewhat fancifully analyzes *chiiya* as being the intransitive/inchoative form of *chiili* (his spelling is *cheli*) 'to breed or bring forth young'. He offers no explanation for the dual number, saying that the word is not always dual anyway; it is sometimes singular.

In another example, that of *ḱkooli* 'plural go', we see that *ḱkooli* lexically may mean 'wiggle', 'start up', in general, 'parts of a whole begin moving'. Thus, we may have such expressions as

- (21) Shōshi -at iḱkooli -t ia -h.
 worm subj wiggle subord go pred
 'The worm goes wiggling.'

In both *chiiya* and *ḱkooli* we see proximate meanings to the singular lexeme and ambiguity about number, with occasional singular usages.

I am told (G.A. Broadwell, p.c.) that in Mississippi, the two usages of *ḱkooli* have diverged, with the 'wiggle' meaning supplied by a different lexeme, *ḱḱkooli* while *ḱkooli* has been reserved for 'plural go'. My analysis is that, since a word *ḱḱkooli* does not appear in Byington's dictionary (from the nineteenth century) (Byington 1915) and my Oklahoma consultants are unfamiliar with it—both Byington and my consultants use *ḱkooli* for both senses—modern speakers in Mississippi may have created a new lexeme to increase clarity.

More formally, we see plural forms used as derivational bases, which suggests that the forms are themselves lexemes, not inflectional variations of a single lexeme.

- (22) iḱkooli + chi (causative marker)
 iḱkoolichi- 'cause to stir'
 hika- 'fly' (sg.)
 hikachi- 'make it fly'

hiili- 'fly' (pl.)
 hiilichi- 'make them fly'

We do not have suppletive verbal forms because we do not have obligatory inflection for number agreement on verbs. Only such inflection provides the grammatical distinction necessary for suppletion.

For the sake of comparison, let us look briefly at a Choctaw grammatical function that is inflectional—the aspect system. All Choctaw verbs are obligatorily marked for one of five aspects (eventive, stative, instantaneous, iterative, and intensive), each of which has a phonological operation associated with it, an infix or deformation of the stem, and which applies to all verbs. Of course, not every aspect is equally represented in usage with every verb for semantic reasons.

- (23) hiili- 'they fly' (eventive)
 hili- 'they are flying' (stative)
 hihli- 'they suddenly fly' (instantaneous)
 hihili- 'they keep on flying' (iterative)
 hiyyiili- 'they are finally flying' (intensive)

Notice that while the plurality of *hiili-* is entirely lexical, its aspect is entirely inflectional. In the Choctaw aspect system, I know of no suppletive forms.

4. Number as a Property of the Category 'Noun'

We have seen that we clearly do not have number inflection on Choctaw nouns or number agreement inflection on Choctaw verbs. On the other hand, we do not have lexical operations on nouns at the word level that would indicate Number, such as separate plural forms, however idiosyncratic. Many words may have a natural semantic number, such as *loksi* 'dirt' which is collective, but this information is not available by anything on the word. Even number-marked verbal forms undergoing category change through conversion, the single most common derivation in Choctaw, will sometimes show a different number value on the derived noun. Thus, *kaha* 'two lie' is also 'a fall'. While *binohli* 'they sit' is also 'settlers', *kashohli* 'mop, clean up things' becomes 'a cleaner'. Any of the derived nouns may change their grammatical number value without a corresponding change in form, even while continuing to incorporate the semantic notion plural. For comparison, the English word *settlement* is grammatically singular but incorporates the notion of plural *settlers*.

It is difficult to argue for number marking as a lexical process when nothing overt happens at the level of the word, and all evidence of Number is in fact peripheral to the word.

I will argue that Number is inherently a nominal property. In Choctaw, Number is marked neither lexically nor inflectionally; it inheres in the category Noun. To distinguish a 'categorial' from a 'lexical' property, a categorial property must be constitutional to the category and be detectable because it affects the syntax. Thus, a lexical feature such as 'diminutive' affects the noun semantically, and may well have a morphological marker (c.f.

Spanish *-ito/-ita*, but it does not engage the syntax. A categorial property, on the other hand, must be present *sine qua non*—its presence effectively defines the category—and syntactic effects follow from there, if we agree that the syntax responds differently to different lexical categories.

If Number were a categorial nominal property, then, it need not have overt morphology, of either lexical or inflectional type. What remains to be shown is that Number is peculiar to and definitive of nouns. The morphological pristineness of Choctaw nouns will serve as a good demonstration of covert number, and thus of the locus of Number in nouns, but this same characteristic makes it more difficult to argue for the constitutional necessity of Number to nouns. Instead, we must show that Number is not expressible anywhere else.

Beard (1992) argues that Number is a 'lexical feature' of nouns because Noun is the only linguistic category to which number can refer semantically. I will further argue that semantic notions of 'multiplicity' and 'quantity' play out differently in the lexical categories, and that only Nouns can categorially express Number; other categories produce different grammatical outputs (to be precise, verbs will express some type of aspect and adjectives will express some gradient).

One of Beard's arguments, which I will adapt to Choctaw, is that Noun Phrases with null heads continue to register Number in the empty nominal category.

- (24) fani ossi mā
 squirrel small/sg det
 that small squirrel

- (25) e ossi mā
 e small/sg det
 that small one; * that smallness; * that small

- (26) fani chipīta homma mā
 squirrel small/pl red det
 those small red squirrels

- (27) e chipīta homma mā
 e small/pl red det
 those small red ones; * those red smallnesses; * those small rednesses; * that red small

Even though we have lexical number marking only on the adjectives *ossi* 'small (sg.)' and *chipīta* 'small (pl.)', the number value must obviously refer semantically to (some) noun. And while Choctaw syntax does not respond to Number directly, it does respond to the category Noun. This mediating syntactic level permits Number to be appropriately confined to expression in nouns; otherwise there is nothing to prevent Number from finding

or other semantically related notions of quantity in nouns as we do in other categories; we have actual linguistic Number. Semantic evidence of Number in verbs and adjectives has only nominal reference. Semantically related notions of quantity, such as iteration, are not linguistic Number. Thus, we have a clean division of output in Choctaw predictable from lexical category, even though the nominal output is neither lexicalized nor syntactic.

5. Conclusion

While Number is a grammatical concept as well as a semantic one, it is more: it is a nominal concept. We are well accustomed to number agreement inflection, but even in languages that do not inflect for number agreement, Number is inherently nominal. The situation is further complicated in a language like Choctaw, which shows no inflection nor lexical marking for Number on nouns. I have argued that Number inheres in the category Noun; this status as a categorial property is what permits the expression of Number to be limited to nouns.

REFERENCES

- Anderson, S. R. 1992. *A-Morphous Morphology*. Cambridge: Cambridge University Press.
- Beard, R. 1992. Lexeme-Morphology Base Morphology: A General Theory of Inflection and Word Formation.
- Broadwell, G. A. 1992. Is Choctaw a Pronominal Argument Language? In *Proceedings of the 1992 Mid-America Linguistics Conference and Conference on Siouan-Caddoan Languages*, University of Missouri at Columbia. MALC.
- Byington, C. 1915. *A Dictionary of the Choctaw Language*. Washington, D.C.: Government Printing Office.
- Corbett, G. G. 1991. *Gender*. Cambridge: Cambridge University Press.
- Mel'cuk, I. 1994. Suppletion: Toward a Logical Analysis of the Concept. *Studies in Language* 18(20):339-410.
- Parsons, T. 1985. Underlying Events in the Logical Analysis of English. In *Actions and Events: Perspectives on the Philosophy of Donald Davidson*, Oxford. Blackwell.



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).